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Catalogue of the Family Pandoridae (Mollusca: Bivalvia)

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The following catalogue was initiated during the preparation of a taxonomic revision of the family Pandoridae.¹ At the time of the completion of that manuscript, the catalogue was incomplete but of such magnitude that it was deemed worthwhile to carry it to completion. A work of this kind is primarily bibliographic and proceeds in a disconcertingly haphazard manner. The basic references, Sherborn's Index Animalium, the Zoological Record, and, in this case, the previous monographic work of Lamy, do not supply all the necessary information, nor do they incorporate all the specific taxa attributed to the family. It is by painstaking reference to original and subsequent literature and chance collation that a catalogue of this sort is compiled.

The presentation intends to include: 1) the generic, sub-generic, specific or subspecific name as originally introduced, 2) the original literature and date citation, 3) the type locality, including the geologic age in case of fossils, and 4) the whereabouts of the type specimens. Cases of taxa erroneously referred to *Pandora*, either originally or subsequently, are noted as not belonging to the family Pandoridae. Their correct systematic placement is indicated if known. If the type specimens

¹ Boss and Merrill, 1964.

could not be found, they are listed as lost; footnotes cite the authority for some of these statements. The actual existence of every type specimen has not been corroborated if the original statement of individual authors or the subsequent remarks of Lamy (1934), or Sherborn (1940), present the necessary documentation.

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ABBREVIATIONS

ANSP	— Academy of Natural Sciences of Philadelphia
BMNH	— British Museum (Natural History)
CAS	— California Academy of Science
MCZ	— Museum of Comparative Zoology
MNHNP	— Muséum national d'Histoire naturelle, Paris
USFC	— United States Fish Commission
USGS	— United States Geological Survey
USNM	— United States National Museum

Generic and Subgeneric Taxa

Andora 'Bruguière' Morse 1919. Proc. Boston Soc. Nat. Hist., **35**(5): 160, error for *Pandora* Bruguière 1797.

Calopodium Röding 1798, Museum Boltenianum, 1st Ed., p. 166 (type species, by monotypy, *Calopodium albidum* Röding, 1798 [= *Tellina inaequalvis* (Linnaeus, 1758)]).

- Cleidiophora** 'Carpenter' Conrad 1868. Amer. Jour. Conch., **3**(4): 269, error for *Clidiophora* Carpenter 1864.
- Clidiophora** Carpenter 1864. Proc. Zool. Soc. London, pt. 3, p. 596 (type species, by original designation, *Clidiophora claviculata* Carpenter 1855 [= *Pandora arcuata* Sowerby 1830]).
- Clidiphora** 'Carpenter' Johnson 1934. Proc. Boston Soc. Nat. Hist., **40**(1): 31, error for *Clidiophora* Carpenter 1864.
- Coelodon** Carpenter 1864. Proc. Zool. Soc. London, pt. 3, p. 599 (type species, by original designation, *Coelodon ceylanicus* (Sowerby 1835)), non Audinet-Serville 1832 (Coleoptera), nec Lund 1838 (Mammalia).
- Foveadens** Dall 1915. Proc. U.S. Nat. Mus., **49**: 451 (type species, by original designation [*Pandora*] *Foveadens panamensis* Dall 1915).
- Frenamya** Iredale 1930. Rec. Australian Mus., **17**: 387 (type species, by monotypy, *Coelodon patulus* Tate 1889).
- Heteroclidus** Dall 1903. Trans. Wagner Free Inst. Sci., **3**(6): 1518 (type species, by original designation, [*Pandora*] *Clidiophora punctata* Conrad 1837).
- Kenerlia** 'Carpenter' Paetal 1875. Fam. Gatt. Moll., p. 103, error for *Kennerlia* Carpenter 1864.
- Kenerlyia** 'Carpenter' Nomura and Hatai 1940. Saito Ho-on Kai Mus., Res. Bull., **19**: 87, error for *Kennerlia* Carpenter 1864.
- Kennerleya** 'Carpenter' Fischer 1887. Manuel de Conchy., p. 1158, emend. for *Kennerlia* Carpenter 1864.
- Kennerleyia** 'Carpenter' Dall 1903. Trans. Wagner Free Inst. Sci., **3**(6): 1517, emend. for *Kennerlia* Carpenter 1864.
- Kennerlia** Carpenter 1864 (Aug.). Brit. Assn. Adv. Sci., Rept. for 1863, pp. 602 and 638; 1864 (Nov.). Proc. Zool. Soc. London, pt. 3, p. 602 (type species, by subsequent designation, Stoliczka 1871, p. 61, *Pandora* (*Kennerlia*) *bicarinata* Carpenter 1864 [= *Pandora* (*Kennerlia*) *bilirata* Conrad 1855]).
- Kennerlyia** 'Carpenter' Dall 1915. Proc. U.S. Nat. Mus., **49**: 448, error for *Kennerlia* Carpenter 1864.
- Kenverlia** 'Carpenter' Nomura and Hatai 1940. Saito Ho-on Kai Mus., Res. Bull., **19**: 88, error for *Kennerlia* Carpenter 1864.
- Panderella** 'Conrad' Palmer 1958. Memoir 76, Geol. Soc. Amer., p. 76, error for *Pandorella* Conrad 1863.
- Pandora** Bruguière 1797, Encyclopédie Méthodique, Vers Testacés, pl. 250, figs. 1 a-c; Lamarck 1799, Mem. Soc. Hist. Nat. Paris, an. vii, p. 88 (type species by subsequent monotypy, Lamarck 1799, *Tellina inaequalis* (Linnaeus 1758)), non Mühlfeld 1811 (Mollusca), nec Eschscholtz 1829 (Ctenophora), nec Haliday 1833 (Diptera), nec Chevrolat 1834 (Coleoptera), nec Westwood 1848 (Lepidoptera), nec Kock 1850 (Arachnida), nec Sars 1895 (Crustacea).
- Pandorella** Conrad 1863. Proc. Acad. Nat. Sci. Philadelphia, for 1862, p. 572 (type species, by monotypy, *Pandora arenosa* Conrad 1834), non Laseron 1951 (Mollusca).
- Pandorina** Scacchi 1836. Catalogus conchyliorum regni neapolitani, p. 6, non Scacchi 1833 (Mollusca), nec Bory de St. Vincent 1827 (Protozoa).
- Trutina** Brown 1827. Illustrations of the Conchology of Great Britain and Ireland, 1st. Ed., pl. 13, fig. 5 (type species, by monotypy, *Trutina solenoidea* Brown 1827 [= *Tellina inaequalis* (Linnaeus 1758)]).

Specific and Subspecific Taxa

- acutedentata** Carpenter 1864, **Clidiophora**. Proc. Zool. Soc. London, pt. 3, p. 598, substitute name for *cornuta* C. B. Adams 1852.
- acutirostrata** Clark 1918, **Pandora (Pandora)**. Univ. Cal. Publ., Bull. Dept. Geol., **11**(2): 138, pl. 11, figs. 7, 9, 13 (University of California Locality 1131, $\frac{1}{2}$ mile SW of town of Walnut Creek in creek bed about 100 yards to E of Oakland and Antioch bridge; elevation 150 feet; Contra Costa Co., $122^{\circ}4'8''$ W, $37^{\circ}53'7''$ N; holotype, Invert. Coll'n, Museum of Paleontology, University of California, No. 11111).
- aequivalvis** Philippi 1836, **Pandora**. Enum. Moll. Siciliae, **1**: 18, pl. 1. fig. 11 (fossilis in calcareo Panormitano [Sicily]) [not a *Pandora*].
- aequivatris** 'Philippi' Philippi 1844, **Pandora**. Enum. Moll. Siciliae, **2**: 16, error for *aequivalvis* Philippi 1836.
- albidum** Röding 1798, **Calopodium**. Museum Boltinianum, 1st Ed., pt. 2, p. 166; 1819, 2nd Ed., pt. 2, p. 116 (substitute name for *Tellina inaequivalvis* (Linnaeus 1758)).
- arctica** Dall 1903, **Pandora (Kennerleyia)**. Trans. Wagner Free Inst. Sci., **3**(6): 1520, pl. 57, fig. 26 (Saco, Maine [Pleistocene]: holotype, USNM 109290).
- arcuata** Sowerby 1835, **Pandora**. Proc. Zool. Soc. London, p. 93 (Hab. apud Sanctam Elenam; syntypes, BMNH, Reg. No. 1964467).¹
- arenata** 'Sowerby' H. and A. Adams 1865, **Pandora**. Gen. Rec. Moll., **2**: 371, *nomen nudum*.
- arenosa** Conrad 1834, **Pandora**. Jour. Acad. Nat. Sci. Philadelphia, **7**(1): 130-1 (Yorktown, Virginia [Miocene]; syntypes, ANSP 30584).
- aversus** Hedley 1913, **Coelodon**. Proc. Linn. Soc. New South Wales, **37**(2): 266 (Mast Head Island in 17-20 fathoms [Queensland, Australia]; holotype, Reg. no. C 19389, Australian Museum, Sydney) [see Hedley 1906, *ibid*, **31**(3): 473-4, pl. 37, fig. 16, *Coelon elongatus* 'Carpenter'].
- bicarinata** Carpenter 1864, **Kennerlia**. Proc. Zool. Soc. London, pt. 3, p. 603 (Catalina Island, California; holotype, USNM 592440).
- bilirata** Conrad 1855, **Pandora**. Proc. Acad. Nat. Sci. Philadelphia, 1st ser., **7**: 267 (California [Miocene]; types, lost [See Palmer, 1958, p. 77]).
- brasiliensis** 'Gould' Paetal 1890, **Pandora**. Catalog der Conchylien-Sammlung **3**: 28, error for *brasiliensis* 'Gould MS' Sowerby [in] Reeve 1874.
- braziliensis** 'Gould MS' Sowerby [in] Reeve 1874, **Pandora**. Conch. Icon., **19**, **Pandora**, pl. 2, fig. 15 (Brazil; holotype, BMNH, Reg. No. 1964464).
- brevifrons** Sowerby 1835, **Pandora**. Proc. Zool. Soc. London, p. 93 (Hab. apud Panamam; types lost).
- brevis** Sowerby 1829, **Pandora**. Catal. Coll. S. Stutchbury, 1, Appx., p. 3 [not a *Pandora*; is the type species of *Myadora* Gray 1840].

¹ The illustrations of *Pandora arcuata*, *P. brevifrons*, *P. ceylanica*, *P. discors* and *P. radiata* were first published in 1854 in Hanley's 'The Conchological Miscellany.'

- brevis** Verrill and Bush 1898, **Kennerlia**. Proc. U.S. Nat. Mus., **20**: 821, pl. 88, figs. 7a–b (USFC *Albatross I*, station 2248, S of Nantucket, Massachusetts, in 67 fathoms; holotype, USNM 40232).
- brunnichi** 'Beck MS' Lamy 1934, **Pandora**. Jour. de Conchy., **78**(2): 105, *nomen nudum*.
- bushiana** Dall 1886, **Pandora (Kennerlia)**. Bull. Mus. Comp. Zool., **12**(6): 312 (Tampa, Florida, in 6 fathoms; holotype, USNM 61029).
- carinatum** Prashad 1932, **Calopodium (Kennerlia)**. The Lamellibranchia of the Siboga Expedition. Systematic Part (Monograph 53c). II Pelecypoda, p. 323, pl. 7, figs. 15–18 (*Siboga* station 159, 0°59.1' S; 129°48.8' E, in 411 meters [N of Poelau Kofiau, Halmaheira Sea]; holotype, Zoölogisch Museum, Amsterdam).
- carolinensis** Bush 1855, **Pandora**. Trans. Conn. Acad., **6**(2): 474 (USFC *Albatross I* station 2113, off Cape Hatteras, North Carolina, in 15 fathoms; holotype, USNM 35701).
- ceylanica** Sowerby 1835, **Pandora**. Proc. Zool. Soc. London, p. 94 (in Mari Ceylanico, et apud Insulam Muerte, Colombiae Occidentalis [Ceylon]; holotype, BMNH, Reg. No. 196271).
- ceylonica** 'Sowerby' Hanley 1842, **Pandora**. Catalogue Recent Bivalve shells, p. 50, error for *ceylanica* Sowerby 1835.
- cistula** Gould 1850, **Pandora**. Proc. Boston. Soc. Nat. Hist., **3**: 217 (East Patagonia; holotype, USNM 5887).
- clavata** McCoy 1844, **Pandora**. [in] Griffith, Synopsis Carboniferous limestone fossils Ireland, p. 51, pl. 11, fig. 2 (no locality given) [not a *Pandora*].
- claviculata** Carpenter 1855, **Pandora**. Proc. Zool. Soc. London, pt. 23, p. 228 (Mazatlan, Mexico; syntypes, BMNH, Reg. No. 196252).
- clavisulcata** 'Carpenter' Paetal 1883, **Pandora**. Catalog der Conchylien-Sammlung, p. 199, error for *claviculata* Carpenter 1855.
- conradi** Mansfield 1929, **Pandora (Clidiophora)**. Proc. U.S. Nat. Mus., **74** (14): 8, pl. 5, figs. 4, 5 (USGS station 1/221, near the bottom of a small ravine entering Blackwater River and about a quarter of a mile from it and one and one-half miles W of Walters, Virginia [Miocene]; holotype, USNM 352441).
- convexa** Dall 1915, **Pandora (Kennerlyia)**. Proc. U.S. Nat. Mus., **49**: 449 (Ballenas Lagoon, Lower California, in 48 fathoms; holotype, USNM 171068).
- copiosa** Sorgenfrei 1958, **Pandora**. Danmarks Geologiske Undersøgelse, II Raekke, Nr. 79, **1**: 138; **2**: pl. 24, figs. a–e [not a–d, as in text] (Toftlund, 105–110 m. depth [Miocene]; holotype, Geological Survey of Denmark, file no. 150.9.b).
- cornuta** C. B. Adams 1852, **Pandora**. Ann. Lyc. Nat. Hist., New York, **5**: 519 (Panama; holotype, MCZ 186309).
- costata** 'Lamarck' Pallary 1920, **Pandora**. Exploration scientifique du Maroc. Fasc. II. Malacologie (1912), p. 98, error for *rostrata* Lamarck 1818.
- crassa** Conrad 1868, **Pandora (Cleidiophora [sic])**. Amer. Jour. Conch., **3**(4): 269, error for *crassidens* Conrad 1838.
- crassidens** Conrad 1838, **Pandora**. Fossils Medial Tertiary United States, p. 2, pl. 1, fig. 2 (James River, near Smithfield, Virginia [Miocene]; types lost [see Moore, 1962, p. 50]).

- cristata** Carpenter 1864, **Clidiophora**. Proc. Zool. Soc. London, pt. 3, p. 597 (Gulf of California; holotype, BMNH, Reg. No. 1963441).
- cumingi** 'Hanley' Lamy 1934, **Pandora (Coelodon)**. Jour. de Conchy., **78** (2): 116, error for *cumingii* Hanley 1861.
- cumingii** Hanley 1861, **Pandora**. Proc. Zool. Soc. London, pt. 2, p. 272 (Samar et Negros, Insulas Philippinas; syntypes, BMNH, Reg. No. 1964466).
- dalli** Gardner 1943, **Pandora (Kennerlia)**. U.S. Geological Survey, Prof. Paper 199-A, p. 45, pl. 10, figs. 21, 24, 26 (one-quarter of a mile below Jones Point, Essex County, Virginia [Miocene]; holotype, USNM 325503).
- defrancei** 'Deshayes' Deshayes 1860, **Pandora**. Desc. Anim. s. Vert. du Bassin de Paris, **1**: 243, error for *defrancii* Deshayes 1824.
- defrancii** Deshayes 1824, **Pandora**. Desc. Coq. foss. Paris, **1**: 61, pl. 9, figs. 15-17 (Grignon [Eocene]; holotype, l'École des Mines, vitrine 32).
- degrangei** Cossmann and Peyrot 1909, **Pandora**. Conchologie néogénique de l'Aquitaine, Livraison 1, p. 40, pl. 1, figs. 15-18 (Sallespisse, environs d'Orthez, Basses pyrénées (Helvetien supérieur [Miocene])); holotype, Degrange-Touzin collection [*teste* Cossmann and Peyrot], Faculté des Sciences, Bordeaux [*teste* Mongin, *in litt.*]).
- delicatus** A. Adams [in] Carpenter 1864, **Coelodon**. Proc. Zool. Soc. London, pt. 3, p. 600 [Japan¹; holotype, BMNH, Reg. No. 196274).
- depressa** Sowerby 1830, **Pandora**. [in] Broderip and Sowerby, Species Conchyliorum, **1**(1): *Pandora*, p. 3, figs. 11, 12 (hab. in littoribus Insularum Maris Pacifici; types lost [see Carpenter 1864, p. 598]).
- diffissa** Mabillet et de Rochebrune 1889, **Pandora**. Miss. scient. Cap Horn, Moll., p. 103 (New Year Sound [Cape Horn, 54°45' S; 64°07' W]; holotype, MNHNP; [*teste* Lamy 1934]).
- dilatata** Deshayes 1860, **Pandora**. Desc. Anim. s. Vert. du Bassin de Paris, **1**: 243, pl. 17, figs. 6-9 (Parnes, Mouchy [Eocene]; holotype, l'École des Mines, vitrine 32).
- discors** Sowerby 1835, **Pandora**. Proc. Zool. Soc. London, p. 93 (no locality given; holotype, BMNH, 1964465).
- dissimilis** Sowerby 1894, **Pandora**. Jour. of Conch., **7**: 374 (Sea Point, Cape Town, South Africa; holotype, BMNH, Reg. No. 1899.4.14.2845).²
- dodona** Dall 1903, **Pandora (Kennerleyia)**. Trans. Wagner Free Inst. Sci., **3**(6): 1518, pl. 57, fig. 25 (uppermost Oligocene sands of Oak Grove, Santa Rosa County, Florida [Miocene]; holotype, USNM 135848a).
- edwardsi** Jousseau 1891, **Pandora**. Le Naturaliste, 13 ann., 2 ser., no. 107, p. 201 (Aden; type lost [see Lamy 1934, p. 118]).
- elongata** Risso 1826, **Pandora**. Hist. Nat. Europe Meridionale, **4**: 373 (La Trinité, Alpes Maritimes [? age]; holotype, Muséum d'Histoire naturelle, Nice [*teste* Risso]).
- elongatus** Carpenter 1864, **Coelodon**. Proc. Zool. Soc. London, pt. 3, p. 600 (China and Borneo; syntypes, BMNH, Reg. No. 196272).

¹ This locality was given subsequently by Sowerby [in] Reeve, 1874, Conch. Icon., **19**, **Pandora**, pl. 3, fig. 17.

² Barnard (1964, p. 572) lists a cotype in the South African Museum, Reg. No. 5622. The specimen may be a paratype.

- eutaenia** Dall 1915, **Pandora (Kennerlyia) glacialis**. Proc. U.S. Nat. Mus., **49**:449 (Sitka Harbor, Alaska, in 15 fathoms; syntypes, USNM 171062).
- filosa** Carpenter 1864, **Kennerlia**. Proc. Zool. Soc. London, pt. 3, p. 602 (Puget Sound, Washington; syntypes, USNM 4542).
- flexuosa** Sowerby 1822, **Pandora**. Genera of Recent and Fossil Shells, **2**, *Pandora*, figs. 4, 5 (East Indies [Red Sea¹]; types lost).
- floridana** Dall 1886, **Pandora (Clidiophora)**. Bull. Mus. Comp. Zool., **12** (6); 312, *nomen nudum*.
- forresterensis** Willett 1918, **Pandora (Kennerlyia)**. Nautilus, **31**(4): 134 (Forrester Island, Alaska, in 50 fathoms; holotype, ANSP 118200).
- gabbi** Dall 1903, **Pandora (Heteroclidus) punctata**. Trans. Wagner Free Inst. Sci., **3**(6): 1521 (Miocene of California near San Buenaventura; holotype, USNM [lost]).
- glacialis** Leach 1819, **Pandora**. Jour. de Physique, **88**: 465 (Baffin's Bay. . . Spitzbergen [restricted to Baffin's Bay, Boss and Merrill (1965, p. 209)]; syntypes, BMNH, Reg. No. 196273).
- gouldiana** Dall 1886, **Pandora (Clidiophora)**. Bull. Mus. Comp. Zool., **12** (6): 312 (Woods Hole, Massachusetts; holotype, USNM 95490).
- grandis** Dall 1877, **Pandora (Kennerlia)**. Proc. Calif. Acad. Sci., **7**: 11 (Unalaska [*sic*], in 100 fathoms; holotype, USNM 171069).
- granulata** Dall 1915, **Pandora (Kennerlyia)**. Proc. U.S. Nat. Mus., **49**: 449 (La Paz, Lower California; holotype, USNM 211348).
- granum** 'Benoist MS' Cossmann 1896, **Pandora**. Sur quelques formes nouvelles ou peu connues des faluns du Bordelais. Association Française pour l'avancement des Sciences, Comte Rendu de la 24me session, Bordeaux 1895, pt. 2, p. 509, pl. 4, figs. 1, 2 (du moulin de l'Eglise, Saucats [St. Médard], Burdigalien [Miocene]; cotypes, Cossmann collection, Laboratoire Géologie Sorbonne, meuble XVI, tirior 1, no. 7678).
- grateloupi** 'Nyst' Bronn 1848, **Pandora**. Index Paleo., **2**: 904, error for *grateloupii* Nyst 1843.
- grateloupii** Nyst 1843, **Pandora**. Desc. Coq. Belgique, p. 74, *nomen nudum*.
- gretschischkini** Slodkewitsch 1938, **Pandora**. Paleontology of USSR, Vol. 10, pt. 3, fasc. 19, Tertiary Pelecypoda from the Far East, Pt. 1, p. 270 [in Russian], Pt. 2, p. 125 [in English], pl. 59, figs. 2a-b (sea coast between sea cliffs and mouth of Etalonnaya River, west coast of Kamchatka, Upper Pliocene; holotype, Geological Museum, F. N. Chernyshev, No. 101/ c 753).
- heberti** de Raincourt 1870, **Pandora**. Bull. Soc. Géol. France, 2nd Ser., **27**: 629, pl. 14, fig. 7 (Le Vivray [Eocene]; holotype, de Raincourt collection, l'École des Mines, vitrine 32).
- higginsoni** 'Phillippi MS' Paetal 1873, **Pandora**. Catalog der Conchylien-Sammlung, p. 129 (Boston; *nomen nudum*).
- hukusimana** Otuka 1943, **Pandora (Heteroclidus)**. Jour. Geol. Soc. Japan, **50**(592): 25, pl. 2, fig. 8 (Iisaka and Manseioozu, Hukusima, Pref. [Miocene]; holotype destroyed in World War II [*teste* Habe]).

This locality was subsequently designated by Sowerby [in] Broderip and Sowerby 1830, Species Conchyliorum, **1**(1): *Pandora*, p. 3.

- inaequalis** 'Linnaeus' Carpenter 1864, **Tellina** [**Pandora**]. Proc. Zool. Soc. London, pt. 3, p. 601, error for *inaequalis* Linnaeus 1758.
- inaequalis** Linnaeus 1758, **Solen**. Systema naturae, 10th Ed., p. 673, no. 32; 1767, Systema naturae, 12th Ed., p. 1118, *Tellina*, no. 56 (in M. Mediterraneo; holotype, Linnean Collection, Linnean Society, London).
- inconspicua** Gabb 1873, **Pandora**. Trans. Amer. Philos. Soc., **15**: 248 (Tertiary of Santo Domingo; lectotype and paralectotypes, selected by Pilsbry, 1922, Proc. Acad. Nat. Sci. Philadelphia, **73**: 414, ANSP 2676).
- indica** Chenu 1862, **Pandora**. Man. Conch., **2**: 51, fig. 214 (no locality given; holotype, Muséum d'Histoire Naturelle, Geneva).
- inflata** Boss and Merrill 1965, **Pandora** (**Pandorella**). Johnsonia, **4**(44): 205, pl. 124, figs. 1-4, pl. 125, figs. 1-2, new name for *brevis* Verrill and Bush 1898, *non* Sowerby 1829.
- inornata** Verrill and Bush 1898, **Cliidiophora**. Proc. U.S. Nat. Mus., **20**: 819, pl. 95, figs. 5, 6 (*Speedwell* station 327, off Cape Cod, south end of Stellwagen Bank, in 17 fathoms; syntypes, USNM 49760).
- intermedia** Jeffreys 1881, **Pandora inaequalis**. Proc. Zool. Soc. London, pt. 4, p. 929, *nomen nudum*.
- japanensis** Nomura and Hatai 1940, **Pandora** (**Kenerlyia**). Saito Ho-on Kai Mus., Res. Bull., **19**: 86, pl. 4, figs. 13 a-d and 14 a-b (Kyuroku-sima, Aomori Pref., Honshu; holotype, Saito Ho-on Kai Museum, Sendai, Japan, Reg. no. 14734).
- lata** Dall 1903, **Pandora** (**Kennerleyia**). Trans. Wagner Free Inst. Sci., **3** (6): 1520, pl. 57, fig. 18 (Miocene of Maryland; holotype, USNM 11875).
- lemensis** Coen 1937, **Pandora**. R[ept.] Comitato Talassografico Italiano, Mem. 240, p. 166 (Canal di Leme, Istria; holotype, Coen Collection [*teste* Coen]).
- majorina** Gardner 1943, **Pandora** (**Cliidiophora**) **crassidens**. U.S. Geological Survey, Prof. Pap. 199-A, p. 47, pl. 10, figs. 25, 28 (Halifax on Quankey Creek, Halifax County, North Carolina [Miocene]: holotype, USNM 325501).
- margaritacea** Lamarck 1801, **Pandora**. Syst. Anim. s. vert., p. 137, substitute name for *Tellina inaequalis* (Linnaeus 1758).
- maxima** Megerle von Muhlfield 1811, **Pandora**. Gesellschaft Nat. Freunde, Magazin, Berlin, **5**(1): 59 [not a *Pandora*].
- nasuta** Sowerby 1830, **Pandora**. [in] Broderip and Sowerby, Species Conchyliorum, **1**(1): *Pandora*, p. 3, figs. 18, 19 (locality unknown; types lost).
- naviculoides** Gardner 1943, **Pandora** (**Kennerlia**). U.S. Geological Survey, Prof. Pap. 199-A, p. 46, pl. 10, figs. 22, 23 (Neills Eddy Landing, Columbus County, North Carolina [Pliocene]; holotype, USNM 325504).
- nipponica** Habe 1952, **Pandora** (**Kennerlia**). [in] Kuroda, Ill. Cat. Japanese Shells, no. 18, p. 125, pl. 18, fig. 6 (Tosa Bay, Shikoku, about 120 fathoms depth; holotype, National Science Museum, Tokyo, Reg. No. 13313).
- oblonga** Sowerby 1830, **Pandora**. [in] Broderip and Sowerby, Species Conchyliorum, **1**(1): *Pandora*, p. 2, fig. 10 (from Gamberoon; types lost).¹

¹ As remarked and discussed by Lamy (1934, p. 107), this species has been the center of some controversy. In the present literature, it appears that the species of *Pandora* which is found on the coast of West Africa has been called *oblonga* Sowerby.

- obtusa** 'Leach MS' Lamarck 1818, **Pandora**. Anim. s. Vert., **5**: 499 (Habite . . . l'Océan britannique; holotype, Muséum d'Histoire Naturelle, Geneva).
- obovata** 'Conrad' Sherborn 1929, **Pandora**. Index Animalium, p. 4479, *lapsus* for *Cytherea obovata* Conrad.
- otukai** Habe 1952, **Pandora (Kennerlia)**. Gen. Jap. Shells, **3**: 259, figs. 689, 690 (name and figures only); [in] Kuroda, Ill. Cat. Jap. Shells, no. 18, p. 124, pl. 18, figs. 11, 12 (Sagami Bay, Honshu, about 50 fathoms in depth; holotype, National Science Museum, Tokyo, Reg. No. 13314).
- panamensis** Dall 1915, **Pandora (Foveadens)**. Proc. U.S. Nat. Mus., **49**: 451 (Old Panama [Pacific Ocean]; holotype, USNM 252276).
- patagonica** Dall 1915, **Pandora (Kennerlyia)**. Proc. U.S. Nat. Mus., **49**: 450 (west coast of Patagonia [*sic*], in 61 fathoms; holotype, USNM 96937).
- patulus** Tate 1889, **Coelodon**. Trans. and Proc. and Rept. Roy. Soc. South Australia (1887-1888), **11**: 60, pl. 11, fig. 1 (Wool Bay, South Australia, in 10 fathoms; holotype, South Australian Museum, Adelaide, Reg. No. D. 13207).
- perangusta** Preston 1910, **Pandora**. Rec. Ind. Mus., **5**(11): 120, fig. 5 (off the Devi River, Orissa Coast, Bay of Bengal, 17-20 fathoms; holotype, Indian Museum, Calcutta, Reg. No. M. 4686/1).
- pinna** Montagu 1803, **Solen**. Testacea Britannica, pt. 1, p. 566, pl. 15, fig. 3 (Torcorss, England; types not in BMNH, possibly in Exeter Museum).
- pinnoides** 'Montagu' Locard 1899, **Pandora**. Coq. mar. côtes de France, p. 261, emendation for *pinna* Montagu 1803.
- primaeva** Deshayes 1860, **Pandora**. Desc. Anim. s. Vert. du Bassin de Paris, **1**: 244, pl. 11 *bis*, figs. 16-18 (Aizy; [Eocene]; syntypes, l'École des Mines, vitrine 32).
- prodromus** Gardner and Aldrich 1919, **Pandora (Clidiophora)**. Proc. Acad. Nat. Sci. Philadelphia, **71**: 44, pl. 4, figs. 9, 11, 12, 14 (Yorktown, York County Virginia, Yorktown Formation [Miocene]; holotype, USNM 325499).
- pseudobilirata** Nomura and Hatai 1940, **Pandora (Kenerlyia)**. Saito Ho-on Kai Mus., Res. Bull., **19**: 87, pl. 19 [4], figs. 15a and 15b (Kyuroku-sima, Aomori Pref., Honshu; holotype, Saito Ho-on Kai Museum, Sendai, Japan, Reg. No. 14733).
- pulchella** Yokoyama 1926, **Pandora**. Jour. Fac. Sci. Imperial Univ., Tokyo, Sec. 2, **1**(9): 387, pl. 45, fig. 4 (Anden, Akita Pref., Honshu [Pliocene]; holotype destroyed in World War II [*teste* Habe]).
- punctata** Conrad 1837, **Pandora**. Jour. Acad. Nat. Sci. Philadelphia, **7**(2): 228, pl. 17, fig. 1 (Santa Barbara, California; types lost. Not in Moore (1962)).
- radians** Dall 1915, **Pandora (Coelodon)**. Proc. U.S. Nat. Mus., **49**: 450 (near Ballenas Lagoon, Lower California, in 5½ fathoms; holotype, USNM 171053).
- radiata** Sowerby 1835, **Pandora**. Proc. Zool. Soc. London, p. 94 (apud Insulam, Muerte, Colombiae Occidentalis [Isla del Muerto, Gulf of Guayaquil, Ecuador]; holotype, BMNH, Reg. No. 1964469).
- rhyphis** Pilsbry and Lowe 1932, **Pandora (Kennerlia)**. Proc. Acad. Nat. Sci. Philadelphia, **84**: 105, pl. 16, figs. 8-11 (La Union, Gulf of Fonseca, San [*sic*] Salvador; holotype, ANSP 155503).
- rostrata** Lamarck 1818, **Pandora**. Anim. s. Vert., **5**: 498 (habite la Médi-

- terraneé et dans la Manche, sur nos côtes; holotype, Museum d'Histoire Naturelle, Geneva).
- scapha** Gabb 1866, **Pandora**. Tertiary Invertebrate Fossils, Palaeo. Calif., v. 2, sect. 1, pt. 1, p. 18 (from the Miocene, west of Martinez, California; holotype, ANSP 4539).
- scapho** 'Gabb' Merriam and Clark [in] Lawson 1914, **Pandora**. San Francisco Folio, U.S. Geol. Survey Folio 193, p. 11, error for *scapha* Gabb, 1866.
- sicula** 'Sowerby MS' Lamy 1934, **Pandora (Pandora) inaequalvis**. Jour. de Conchy., **78**(2): 103 (Palermo, Sicily; syntypes, MNHNP [teste Lamy 1934]).
- similis** Sowerby 1897, **Pandora**. Appendix to Marine Shells South Africa, p. 29 (Durban; holotype, BMNH, Reg. No. 1964470).¹
- solenoida** Brown 1827, **Trutina**. Ill. Conch. Great Britain and Ireland, pl. 13, fig. 5, substitute name for *Solen pinna* Montagu 1803.
- squamula** 'Payraudea MS' Lamy 1934, **Pandora**. Jour. de Conchy., **78**(2): 105 (Ajaccio, Corsica; *nomen nudum*).
- striata** Quoy and Gaimard 1835, **Pandora** [in] D'Urville, Voyage l'Astrolabe, Zoologie, **3**: 537, pl. 83, fig. 10 (New Zealand; holotype, MNHNP), [is a species of *Myadora* Gray 1840].
- tabacea** 'Meuschen' Carpenter 1864, **Clidiophora [Anomia]**. Proc. Zool. Soc. London, pt. 3, p. 597, *nomen nudum*.
- tenuis** Jeffreys 1865, **Pandora inaequalvis**. Brit. Conch., **3**: 25 (between 85 and 100 f[athoms], off Unst. Shetland; types lost).
- trilineata** Say 1822, **Pandora**. Jour. Acad. Nat. Sci. Philadelphia, 1st Ser., **2**: 261 (Great Egg Harbor, New Jersey; types lost [not in ANSP]).
- truncata** 'Turton' Paetal 1890, **Pandora**. Catalog der Conchylien-Sammlung, **3**: 29, based on *Anatina truncata* Turton 1822, Conch. Ins. Brit., p. 46, pl. 4, fig. 6 [not a *Pandora*].
- tuomeyi** Gardner and Aldrich 1919, **Pandora (Clidiophora)**. Proc. Acad. Nat. Sci. Philadelphia, **71**: 45, pl. 4, figs. 8, 10, 13 (Walker's Bluff, Bladen County, North Carolina, Waccamaw Formation [Miocene]; holotype, USNM 325502).
- uncifera** Pilsbry and Lowe 1932, **Pandora**. Proc. Acad. Nat. Sci. Philadelphia, **84**: 104, pl. 17, figs. 17-19 (Acapulco, Mexico, in 20 fathoms; holotype, ANSP 155632).
- unguiculus** Sowerby 1830, **Pandora**. [in] Broderip and Sowerby, Species Conchyliorum, **1**(1): *Pandora*, p. 3, figs. 16, 17 (locality unknown; types lost).
- vanwinkleae** Tegland 1933, **Pandora**. Univ. Calif. Publ., Bull. Dept. Geol. Sci., **23**(3): 113, pl. 7, figs. 1, 2 (in sandstone cliff on north side of Restoration Point, opposite Seattle, Section 12, T. 24, N. R. 2 E, Kitsap County, Washington; holotype, Coll. Invert. Paleo., Univ. Calif. No. 32114).
- vladivostokensis** Skarlato 1955, **Pandora**, [in] Strelkov [ed.]. Atlas of the Invertebrates of the far-eastern seas of the USSR [in Russian], p. 198, pl. 53, fig. 10 (Japan Sea; types possibly in the Zoological Institute, Academy of Sciences, Leningrad).

¹ Barnard (1964, p. 573) lists cotypes in South African Museum, Reg. No. A29743). The specimens may be paratypes.

- wajampolkensis** Slodkewitsch 1938, **Pandora**. Paleontology of USSR, Vol. 10, pt. 3, fasc. 19, Tertiary Pelecypoda from the Far East, Pt. 1, p. 272 [in Russian], Pt. 2, p. 126 [in English], pl. 59, figs. 1 a-b (Belogolovaya River, western coast of Kamchatka, Vayempolka series, Upper Miocene; holotype, Geological Museum, F. N. Chernyshev, No. 101/ c 754).
- washingtonensis** Weaver 1916, **Pandora**. Univ. Washington Publ. in Geol., 1(1): 37-38, pl. 2, figs. 19, 20 (at locality 256 [University of Washington Paleontological Collection] in railway cuts on the O.-W. R. R. and N. Co. [Oregon-Washington=Union Pacific] one fourth mile northwest of Lincoln Creek Station in Section 27, T. 15 N, R. 3 W., Lowermost Oligocene; holotype, CAS 262).
- wardiana** A. Adams 1859, **Pandora**. Proc. Zool. Soc. London, pt. 3, p. 487 (hab. in littoribus Mantchuriae [Sunday Island, Coast of Mantchuria, in 20 fathoms]; holotype, BMNH, Reg. No. 1964468).
- yakatagensis** Clark 1932, **Pandora** (**Kennerlia**). Bull. Geol. Soc. Amer., 43(3): 809, pl. 17, figs. 1, 2 (University of California Locality 3869 [near Fulton Creek, S of Yakataga River, Alaska], upper Oligocene; holotype, Invert. Coll'n, Museum of Paleontology, University of California, No. 30399).
- zealandica** 'Sowerby' Paetal 1883, **Pandora**. Catalog der Conchylien-Sammlung, p. 199, *nomen nudum*.

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